IDEM **Guidance**
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Managing Lead-Based Paint Waste

Lead-based paint (LBP) waste is generated from a variety of sources. Historically, lead was a component of many paints and was utilized for both residential and industrial applications. Because of well-documented health concerns, LBP is often intentionally removed from the surfaces to which it was applied and then disposed, or the structure to which it was applied is itself disposed. These activities are known as "lead abatement" or "deleading". LBP waste is also generated as a result of routine structural maintenance, such as repainting or remodeling, where lead abatement is not the actual purpose of the activity. The waste may consist of actual structural debris coated with lead based paint or concentrated waste such as scrapings, sludges from liquid removal practices, blast grit, dust, and other materials. Debris includes both demolition debris and architectural component debris. Demolition debris includes any solid material resulting from the demolition of housing, or public or commercial buildings. Architectural component debris includes elements or fixtures including, but not limited to, moldings, doors, trim, floors, radiators, shelves, gutters, windows, cabinets, etc. Sampling of LBP debris is problematic. Results are seldom reproducible and are influenced by sample type, collection, preparation, and site conditions.

Lead abatement of residential structures is regulated by federal rules of the Toxic Substances Control Act (TSCA) at 40 CFR 745. State rules covering lead abatement activities have also been adopted. Whether from lead abatement or other activities, the actual disposal of the LBP waste is potentially regulated by the Resource Conservation and Recovery Act (RCRA) at 40 CFR 260. This document is intended to provide guidance on the disposal of LBP waste from both residential and industrial sources under the RCRA hazardous waste regulations. IDEM believes that the following interpretations are safe, reliable, effective, protective of human health and the environment, and will lead to a reduced exposure to LBP. (Attached at the end of this document is Table 1, which shows disposal options for LBP waste based on type and source.)

Residential LBP Waste

Residential LBP waste is waste generated by a homeowner or contractor through LBP removal activities from a household. Solid waste that is generated from a household is exempt from being a RCRA hazardous waste (See 40 CFR 261.4(b)(1)). "Household" is defined as: single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds and day-use recreation areas. Residential soil contaminated with LBP from residences also meets the definition of household LBP waste. (Residential soil contaminated with lead from other sources, such as industrial processes, is not exempt household waste.)

Handling and Disposal of Residential LBP Waste

At this time, LBP waste, whether debris or concentrated, removed from a household by the homeowner or a contractor, is considered solid waste and not hazardous waste and may be disposed of as municipal solid waste. Actual abatement or deleading activities may be subject to TSCA regulation. Concentrated LBP, waste such as chips, scrapings, and dust derived from a household *must* be sent to a landfill or other waste facility that is permitted by IDEM to accept municipal waste. It is strongly recommended that structural LBP debris, including debris from the demolition of residential structures, be

disposed at construction/demolition (C/D) landfill sites, and this may be a requirement of future rulemakings. It is not necessary to test LBP waste or debris from a residential structure prior to disposal at a state permitted C/D site or Municipal Solid Waste Landfill (MSWLF) . A list of approved C/D landfills is available from the Internet address listed at the end of this document or by calling 317/232-0066.

If LBP is removed from the original substrate to which it was adhered, precautions must be taken to properly containerize the waste in order to prevent releases to air, land and water. Please see the TSCA regulations at 40 CFR 275 for specific standards for the abatement of lead paint hazards in residential structures. For activities subject to TSCA regulations, contractors must be trained and certified . The standards require, in general, that if a regulated contractor/generator collects the LBP waste at ground level, an impermeable base or liner must be placed on the ground to prevent soil contamination. During precipitation events, or if liquid wastes are generated during removal activities, measures must be taken to ensure that water contaminated with waste is contained and does not contaminate surrounding soil and surface water. In addition, precautions must be taken to prevent releases to the air which may result in soil and/or surface water contamination and to prevent exposure of removal worker(s) and the general public to LBP residues. For residential structures subject to the TSCA standards, LBP waste must be placed in 6 mil plastic (or two 4 mil plastic bags) and stored in a designated secure area. It is recommended that all residential LBP waste be managed in the above manner. Again, please see 40 CFR 275 for specific standards for the abatement of lead paint hazards in residential structures, or call the toll-free Lead Hotline number at (888) 574-8150 for more information.

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Proposed Rules for LBP Debris

On December, 18, 1998 EPA proposed additional rules (see 63 FR 70203 and 70233) that would regulate LBP debris under TSCA**.** The proposed rules would not apply to concentrated wastes. The proposed rules would require all generators of LBP debris (other than homeowners who conduct LBP activities themselves) to meet additional management standards. The proposed rules would apply to all persons, individuals, and firms who generate, store, transport, or reuse LBP debris, including homeowners whose housing is occupied by a person or persons other than the owner or the owners immediate family. If a homeowner hires an individual or contractor to perform abatement, demolition, or renovation activities and LBP debris is created, that individual or contractor would be considered the generator. Generators would be required to limit access to LBP debris after three days by enclosing debris in closed or covered receptacles, a dumpster that is at least six feet tall, in fenced areas that are locked, or other locked structures. Storage would be limited to 180 days. Whenever LBP debris is transferred, the proposed rules would require notification to the recipient. LBP debris would be required to be transported in covered vehicles. Before debris covered with deteriorated LBP could be reused, the LBP would need to be completely removed. At this time, IDEM encourages these practices for all generators, and these may be required by future rulemakings.

Handling and Disposal of Non-Residential LBP Waste

Because sampling of LBP debris is problematic, and because IDEM believes it is protective of human health to dispose of LBP debris in either a C/D or MSWLF environment, LBP construction debris (either demolition or architectural) from a nonresidential structure may be managed as C/D waste as defined in 329 IAC 10-2-37 and disposed in a state permitted MSWLF or C/D facility. A list of all state permitted disposal facilities may be obtained from the Internet address listed at the end of this document or by calling 317/232-0066. It is not necessary to test debris containing LBP prior to disposal at a state permitted C/D site or MSWLF . Metal components covered with LBP may be recycled as scrap metal.

However, if the nonresidential LBP **is removed** from the original substrate (e.g. paint chips, blasting grit with paint chips, stripping agent with paint chips) to which it was adhered, then the generator is required to make a hazardous waste determination for the concentrated waste and, if found to be hazardous, the waste is subject to RCRA hazardous waste rules. This may be determined by testing or knowledge of the waste (a guidance document titled Understanding the Hazardous Waste Determination

Process is available upon request). The entire waste stream must be analyzed. The analysis should include the eight RCRA metals. At a minimum, Lead, Chromium and Cadmium have a high probability of being present based on staff review of commercial blasting debris from surfaces coated with metal based paints. LBP waste is hazardous if it exceeds 5.0 mg/L for Lead or Chromium or if it exceeds 1.0 mg/L for Cadmium as determined by the Toxicity Characteristic Leaching Procedure (TCLP).

Concentrated hazardous LBP waste such as chips, dust, etc., from nonresidential sources is subject to all applicable hazardous waste management standards. If more than 2200 pounds of hazardous waste is generated in a month, the site is subject to large quantity generator (LQG) standards and the waste may not be stored on-site for greater than 90 days. If the site generates between 220 and 2200 pounds of hazardous waste in a month, the site is subject to small quantity generator (SQG) standards and the waste may not be stored on-site for greater than 180 days (or 270 days for a small-quantity generator that transports waste greater than 200 miles). Hazardous waste generated by LQG's and SQG's must be transported to a permitted treatment, storage or disposal (TSD) facility using a hazardous waste manifest. A site that generates less than 220 pounds of hazardous waste is a conditionally exempt small quantity generator (CESQG). Concentrated LBP waste from a CESQG may be managed in an MSWLF. A guidance document titled Understanding the Hazardous Waste Rules is available upon request or through the Internet and provides further guidance on the standards applicable to generators of RCRA hazardous waste.

Non-hazardous concentrated LBP waste such as chips, dust, etc., from nonresidential or non-commercial sources is an industrial waste. Industrial waste must be handled in accordance with Indiana's Industrial Waste Law IC 13-20-7.5.

If you need additional information, or have any questions or concerns, please contact staff of the Industrial Waste Compliance program at 317-308-3103. The IDEM toll-free telephone number is 1-800-451-6027. Information is also available through the Internet at http://www.state.in.us/idem/olq.

TABLE 1: Lead-Based Paint Waste Disposal

The table below shows the type of facility where lead-based paint waste must be disposed based on the type and source of the waste.

WASTE SOURCE	WASTE TYPE: Debris	WASTE TYPE: Hazardous Concentrated Waste	WASTE TYPE: Non-hazardous Concentrated Waste
Residential	CD/MSWLF	MSWLF	MSWLF
Non-Residential (more than 220 lbs)	CD/MSWLF	TSD	MSWLF* (Special Waste)
Non-Residential (less than 220 lbs)	CD/MSWLF	TSD/MSWLF	MSWLF

TSD = Treatment, Storage or Disposal facility, permitted under RCRA, for the disposal of regulated hazardous waste.

MSWLF = A state permitted Municipal Solid Waste Landfill

* = Require certification or verification under state Special Waste regulations

CD= A state permitted Construction/Demolition waste facility.

Debris = Both demolition debris and architectural component debris. Demolition debris includes any solid material resulting from the demolition of housing, or public or commercial buildings. Architectural component debris includes elements or fixtures including, but not limited to, moldings, doors, trim, floors, radiators, shelves, gutters, windows, cabinets, etc.

Concentrated waste = Chips, dust, contaminated blasting debris, sludge, scrapings, flakes, etc. Hazardous concentrated waste fails the TCLP test, usually because of lead or other metals contamination, and is subject to regulation under RCRA.